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The time period for reply, if any, is set in the attached communication.

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* MIKE FAVET and ERIC G. LOVETT

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Appeal 2009-003756  
Application 10/821,125  
Technology Center 3700

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Decided: February 23, 2010

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Before: WILLIAM F. PATE III, JOHN C. KERINS, and  
FRED A. SILVERBERG, *Administrative Patent Judges*.

PATE III, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF CASE

Appellants appeal under 35 U.S.C. § 134 from a rejection of claims 1-15 and 68. App. Br. 3 We have jurisdiction under 35 U.S.C. § 6(b).

The claims are directed to an implantable device for preventing sudden cardiac death. Claim 1, reproduced below, is illustrative of the claimed subject matter:

1. An implantable device for preventing sudden cardiac death, comprising:

a housing configured for implantation in a patient;

energy delivery circuitry provided in the housing, the energy delivery circuitry configured to deliver only two forms of cardiac therapy, the two forms of cardiac therapy comprising a non-physiologic, life sustaining pacing therapy and a therapy to treat a tachyarrhythmia;

detection circuitry provided in the housing, the detection circuitry configured to detect cardiac rhythms;

a lead system comprising one or more lead electrodes, the lead system coupled to the energy delivery circuitry and the detection circuitry; and

control circuitry provided in the housing and coupled to the energy delivery circuitry and the detection circuitry, the control circuitry configured to coordinate delivery of the tachyarrhythmia therapy in response to detection of a tachyarrhythmia requiring treatment and delivery of the non-physiologic, life sustaining pacing therapy in response to detection of cardiac asystole.

## REFERENCES

The prior art relied upon by the Examiner in rejecting the claims on appeal is:

Gill

US 5,074,301

Dec. 24, 1991

## REJECTIONS

Claims 1-12 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Gill. Ans. 3.

Claims 13-15 and 68 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Gill. Ans. 6.

### ISSUES

Appellants argue claims 1-12 as a group. App. Br. 8. We select claim 1 as the representative claim, and claims 2-12 will stand or fall with claim 1. 37 C.F.R. § 41.37(c)(1)(vii). The sole issue raised by Appellants regarding claim 1 is whether the Examiner erred by interpreting the term “non-physiologic, life sustaining pacing therapy” to include the “bradycardia support pacing” of Gill. App. Br. 8-11; Reply Br. 3-5.

Claims 13-15 are argued solely based upon their dependence from claim 1. App. Br. 11.

The sole issue raised by the Appellants regarding claim 68 is whether the Examiner erred in concluding that the claimed rate of 5-20 pacing pulses per minute was the product of a routine optimization, absent evidence that the rate of pacing pulses was a known result-effective variable. App. Br. 12; Reply Br. 5.

### FINDINGS OF FACT

1. Bradycardia occurs when the heart rhythm is too slow. This condition may be caused by a variety of factors. Bradycardia produces a heart rate that is too slow to maintain adequate circulation. Spec 2:5-9.
2. According to one embodiment of the claimed invention an implantable cardiac device is configured to deliver a non-physiologic, life sustaining pacing therapy which is “preferably a therapy deliverable at a rate lower than a bradycardia pacing rate.” Spec. 3:11-18.
3. In accordance with another embodiment of the claimed invention, the implantable device is configured to deliver “a pacing therapy deliverable

at a rate lower than a bradycardia pacing rate.” Spec. 4:7-11; *See also* Spec. 28:15 – 29:1.

4. Figure 13 of the Specification illustrates typical bradycardia pacing, whereas Figure 14 illustrates “a non-physiologic pacing therapy that delivers pacing pulses at a rate substantially below a conventional bradycardia pacing rate, but at a rate sufficient to sustain life.” Spec. 36:5-13. Such pacing commences upon detection of post-shock asystole. Spec. 36:14-21.
5. Gill discloses a device that, in addition to delivering a shock for tachyarrhythmia, provides a bradycardia support pacing. Abstract; col. 6, ll. 34-50; fig. 4C.
6. Gill describes the benefits of delaying the bradycardia support pacing upon detection of asystole but does not discuss providing any particular rate of pacing. Col. 6, ll. 34-50.

#### PRINCIPLES OF LAW

The PTO applies to verbiage of the proposed claims the broadest reasonable meaning of the words in their ordinary usage as they would be understood by one of ordinary skill in the art, taking into account whatever enlightenment by way of definitions or otherwise that may be afforded by the written description contained in applicant’s specification. *In re Morris*, 127 F.3d 1048, 1054-55 (Fed. Cir. 1997). Reading a claim in light of the specification, to thereby interpret limitations explicitly recited in the claim, is a quite different thing from reading limitations of the specification into a claim, to thereby narrow the scope of the claim by implicitly adding disclosed limitations which have no express basis in the claim. *In re Prater*,

415 F.2d 1393, 1404-05, (CCPA 1969). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. *In re Van Geuns*, 988 F.2d 1181 (Fed. Cir. 1993).

“[W]here the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation.” *In re Aller*, 220 F.2d 454, 456 (CCPA 1955). A particular parameter must first be recognized as a result-effective variable, i.e., a variable which achieves a recognized result, before the determination of the optimum or workable ranges of said variable might be characterized as routine experimentation. *In re Antonie*, 559 F.2d 618 (CCPA 1977).

#### ANALYSIS

Appellants’ argument that the term “non-physiologic, life sustaining pacing therapy” in claim 1 should be interpreted to exclude Gill’s “bradycardia support pacing” is unpersuasive. While Appellants’ Specification discloses particular embodiments where the implantable device is configured to deliver “a pacing therapy deliverable at a rate lower than a bradycardia pacing rate,” other embodiments describe that rate as only “preferable.” *Cf.* Facts 2 and 3. Since claim 1 could be read on either of these embodiments it would be improper to conclude that, read in light of the Specification, “non-physiologic, life sustaining pacing therapy” means “pacing at a rate lower than bradycardia pacing” as Appellants suggest. App. Br. 10.

Appellants state that one of ordinary skill in the art would recognize figure 14 as illustrating “a non-physiologic pacing therapy that delivers pacing pulses at a rate substantially below a conventional bradycardia pacing

rate, but at a rate sufficient to sustain life.” Fact 4. However, the Specification never indicates that figure 14, solely by virtue of demonstrating delivery of pacing pulses at rate substantially below a conventional bradycardia pacing rate, would be recognized as illustrating a “non-physiologic, life sustaining pacing therapy.” Appellants have chosen to employ broader language in the claim than is used in the Specification to describe the pacing therapy. It would be improper to import limitations from the Specification into the claims. *See Superguide Corp. v. DirecTV Enterprises, Inc.*, 358 F.3d 870, 875 (Fed. Cir. 2004) (“Though understanding the claim language may be aided by the explanations contained in the written description, it is important not to import into a claim limitations that are not a part of the claim. For example, a particular embodiment appearing in the written description may not be read into a claim when the claim language is broader than the embodiment.”)

Furthermore, the term “bradycardia”, read in light of the Specification, would be understood by one of ordinary skill in the art to describe a particular condition. Fact 1. While there may be industry standards for delivering a pacing therapy to treat such a condition, Gill’s mere disclosure of bradycardia support pacing does not necessarily imply any particular pacing rate. Both Gill’s and Appellants’ pacing are aimed at treating the same life-threatening condition—asystole. Facts 4 and 6. Since the limitation requiring “non-physiologic, life sustaining pacing therapy” does not require pacing at any specific rate, it does not exclude Gill’s “bradycardia support pacing.” *See* Fact 5.

For these reasons, the Examiner did not err by interpreting the term “non-physiologic, life sustaining pacing therapy” to include the “bradycardia

support pacing” of Gill.

Regarding claim 68, as noted above, Gill is silent regarding particular pacing rates. Fact 6. The Examiner has not provided any evidence to establish that changes in the pacing rate were known to change the effectiveness of the pacing therapy described by Gill. Since the Examiner has not provided any evidence to establish that Gill’s pacing rate was known to be a result-effective variable, it amounts to speculation and conjecture to conclude that discovering the optimum pacing rate was the product of routine experimentation. Since speculation and conjecture cannot form the basis for concluding obviousness, we are constrained to reverse the rejection of claim 68.

#### CONCLUSIONS OF LAW

The Examiner did not err by interpreting the term “non-physiologic, life sustaining pacing therapy” to include the “bradycardia support pacing” of Gill. The Examiner erred in concluding that the claimed rate of 5-20 pacing pulses per minute was the product of a routine optimization, absent evidence that the rate of pacing pulses was a known result-effective variable.

#### DECISION

For the above reasons, the Examiner’s rejection of claims 1-15 is affirmed and the Examiner’s rejection of claim 68 is reversed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). See 37 C.F.R. § 1.136(a)(1)(iv) (2009).

#### AFFIRMED-IN-PART

Vsh



Appeal 2009-003756  
Application 10/821,125

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